

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : David J. Boothby
Serial No. : 09/939,526
Filed : August 24, 2001
Title : SYNCHRONIZATION OF RECURRING RECORDS IN INCOMPATIBLE
DATABASES

Art Unit : 2125
Examiner : Maria N. Von Buhr

Commissioner for Patents
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Technology Center 2100

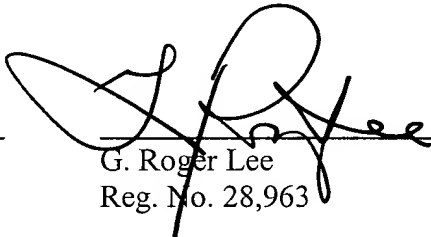
INFORMATION DISCLOSURE STATEMENT

Copies of the references listed on the attached form PTO-1449 are enclosed. Applicant does not concede that the listed references are prior art.

This statement is being filed before the receipt of a first Office action on the merits.
Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 9/8/03



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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 05110-006002	Application No. 09/939,526
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant David J. Boothby	
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U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	6,330,568	12/11/01	Boothby et al.			
	AB	6,272,074	08/07/01	Winner			
	AC	6,141,664	10/31/00	Boothby			
	AD	6,098,078	08/01/00	Gehani et al.			
	AE	5,995,980	11/30/99	Olson et al.			
	AF	5,974,238	10/26/99	Chase, Jr.			
	AG	5,966,714	10/12/99	Huang et al.			
	AH	5,956,508	09/21/99	Johnson et al.			
	AI	5,928,329	07/27/99	Clark et al.			
	AJ	5,926,824	07/20/99	Hashimoto			
	AK	5,924,094	07/13/99	Sutter			
	AL	5,892,909	04/06/99	Grasso et al.			
	AM	5,884,325	03/16/99	Bauer et al.			
	AN	5,884,324	03/16/99	Cheng et al.			
	AO	5,884,323	03/16/99	Hawkins et al.			
	AP	5,877,760	03/02/99	Onda et al.			
	AQ	5,875,242	02/23/99	Glaser et al.			
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	AS	5,870,759	02/09/99	Bauer et al.			
	AT	5,838,923	11/17/98	Lee et al.			
	AU	5,832,218	11/03/98	Gibbs et al.			
	AV	5,832,489	11/03/98	Kucala			
	AW	5,819,272	10/06/98	Benson			
	AX	5,819,274	10/06/98	Jackson, Jr.			
	AY	5,813,009	09/22/98	Johnson et al.			
	AZ	5,809,494	09/15/98	Nguyen			
	AAA	5,790,789	08/04/98	Suarez			

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	ABB	5,781,908	07/14/98	Williams et al.			
	ACC	5,758,083	05/26/98	Singh et al.			
	ADD	5,745,712	04/28/98	Turpin et al.			
	AEE	5,737,539	04/07/98	Edelson et al.			
	AFF	5,708,840	01/13/98	Kikinis et al.			
	AGG	5,708,812	01/13/98	Van Dyke et al.			
	AHH	5,706,509	01/06/98	Man Hak Tso			
	AII	5,706,452	01/06/98	Ivanov			
	AJJ	5,704,029	12/30/97	Wright Jr.			
	AKK	5,689,706	11/18/97	Rao et al.			
	ALL	5,671,407	09/23/97	Demers et al.			
	AMM	5,659,741	08/19/97	Eberhardt			
	ANN	5,649,182	07/15/97	Reitz			
	AOO	5,630,081	05/13/97	Rybicki et al.			
	APP	5,623,540	04/22/97	Morrison et al.			
	AQQ	5,619,689	04/08/97	Kelly			
	ARR	5,615,109	03/25/97	Eder			
	ASS	5,615,364	03/25/97	Marks			
	ATT	5,613,113	03/18/97	Goldring			
	AUU	5,608,865	03/04/97	Midgely et al.			
	AVV	5,596,574	01/21/97	Perlman et al.			
	AWW	5,581,754	12/03/96	Terry et al.			
	AXX	5,581,753	12/03/96	Terry et al.			
	AYY	5,557,518	09/17/96	Rosen			
	AZZ	5,560,005	09/24/96	Hoover et al.			
	AAAA	5,530,939	06/25/96	Mansfield, Jr. et al.			
	ABBB	5,530,853	06/25/96	Schell et al.			

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	ACCC	5,455,945	10/03/95	VanderDrift			
	ADDD	5,421,012	05/30/95	Khoyi et al.			
	AEEE	5,412,801	05/02/95	De Remer et al.			
	AFFF	5,323,314	06/21/94	Baber et al.			
	AGGG	5,278,982	01/11/94	Daniels et al			
	AHHH	5,276,876	01/04/94	Coleman et al.			
	AIII	5,220,540	06/15/93	Nishida et al.			
	AJJJ	5,201,010	04/06/93	Deaton et al.			
	AKKK	5,197,000	03/23/93	Vincent			
	ALLL	5,155,850	10/13/92	Janis et al.			
	AMMM	5,134,564	07/28/92	Dunn et al.			
	ANNN	5,124,912	06/23/92	Hotaling et al.			
	AOOO	4,939,689	07/03/90	Davis et al.			
	APPP	4,831,552	05/16/89	Scully et al.			
	AQQQ	4,819,191	04/04/89	Scully et al.			
	ARRR	4,817,018	03/28/89	Cree et al.			
	ASSS	4,807,155	02/21/89	Cree et al.			
	ATTT	4,807,154	02/21/89	Scully et al.			
	AUUU	4,162,610	07/31/79	Levine			

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AVVV	Adly, "HARP: A Hierarchical Asynchronous Replication Protocol for Massively Replicated Systems," Computer Laboratory, Cambridge University, United Kingdom (undated)
	AWWW	Adly et al., "A Hierarchical Asynchronous Replication Protocol for Large Scale Systems," Computer Laboratory, Cambridge University, United Kingdom, Computer Science Department, Alexandria University, Egypt (undated)
	AXXX	Alexander, "Designed, sold, delivered, serviced," Computerworld Client/Server Journal, pp. 43 (10/01/95)
	AYYY	"All I need is a miracle; computer-aided educational packages; Small Wonders," Coastal Associates Publishing L.P. (03/1992)

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	AZZZ	Alonso et al., "Database System Issues in Nomadic Computing," Matsushita Information Technology Laboratory, New Jersey (undated)
	AAAAA	Badrinath et al., "Impact of Mobility on Distributed Computations," Operating Systems Review (April 1, 1993)
	ABBBB	Barbara et al., "Sleeper and Workaholics: Caching Strategies in Mobile Environments (Extended Version)" (08/29/1994)
	ACCCC	Bowen, M. et al., "Achieving Throughput and Functionality in a Common Architecture: The Databcycle Experiment, <i>IEEE</i> , pp. 178, 1991.
	ADDDD	Brandel, "New offerings fuel revival of PIM," Computerworld, p. 39 (09/12/94)
	AEEEE	Demers et al., "The Bayou Architecture: Support for Data Sharing Among Mobile Users," Computer Science Laboratory, Xerox Palo Alto Research Center, California (undated)
	AFFFF	DeVoe et al., "SOFTWARE: Day-Timer Organizer 2.0 based on format of paper-based PIM," InfoWorld, Vol. 17 (08/21/95)
	AGGGG	Froese, "File System Support for Weakly Connected Operation," pp. 229-238 (undated)
	AHHHH	Greenberg et al., "Real Time Groupware as a Distributed System: Concurrency Control and its Effect on the Interface," Procs. Of the ACM CSCW Conf. On Computer Supported Cooperative Work, Oct. 22-26, North Carolina, ACM Press (01/01/94)
	AIIII	Guy, "Ficus: A Very Large Scale Reliable Distributed File System," Technical Report CSD-910018, Computer Science Dept. UCLA (Technical Report) (06/03/91)
	AJJJJ	Guy et al., "Implementation of the Ficus Replicated File System," appeared in Procs. Of the Summer USENIX Conf., Anaheim, CA, pp. 63-71 (06/01/90)
	AKKKK	Haber, "Renegade PIMS," Computerworld, p. 109 (12/12/94)
	ALLLL	Hammer et al., "An Approach to Resolving Semantic Heterogeneity in a Federation of Autonomous, Heterogeneous Database Systems," Computer Science Department, University of Southern California (undated)
	AMMMM	Hammer et al., "Object Discovery and Unification in Federated Database Systems," University of Southern California (undated)
	ANNNN	HP and IntelliLink connect HP 95LX with HP NewWave; IntelliLink for the HP NewWave; product announcement," HP Professional (08/1991)
	AOOOO	"HP announces expanded memory version of palmtop PC, introduces 1-Megabyte HP 95LX and 1-Megabyte memory cards," Business Wire, Inc. (03/04/92)
	APPPP	Huston et al., "Disconnected Operation of AFS," CITI Technical Report 93-3, Center for Information Technology Integration, University of Michigan (06/18/93)
	AQQQQ	IBM Dictionary of Computing, Tenth Edition, 1993, pp. 268, 269, 31_
	ARRRR	IBM Dictionary of Computing, Tenth Edition, 1993, pp. 165, 268, 349, 370, 417
	ASSSS	IEEE Standard Dictionary of Electrical and Electronics Terms, Fourth Edition, 1988, p. 372, 368, 509, 563
	ATTTT	Imielinski, "Mobile Computing - DataMan Project Perspective," Rutgers University (undated)
	AUUUU	"IntelliLink 2.2: the software connection from desktop to palmtop; Software Review; IntelliLink 2.2; Evaluation," PC Magazine (04/28/92)

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	AVVVVV	"IntelliLink transfers palmtop, PC data; communications software from IntelliLink Inc; brief article; Product Announcement," PC Week (11/18/91)
	AWWWWW	Jacobs et al., "A Generalized Query-by-Example Data Manipulation Language Based on Database Logic," IEEE Transactions on Software Engineering, Vol. SE-9, No. 1 (01/1983)
	AXXXXX	Jenkins, "Users struggle with E-mail Woes," Computerworld, p. 97 (10/24/94)
	AYYYYY	Johnson et al., "Hierarchical Matrix Timestamps for Scalable Update Propagation," submitted to the 10 th Int. Workshop on Distributed Algorithms (06/25/96)
	AZZZZZ	Joshi et al., "A Survey of Mobile Computing Technologies and Applications," (10/29/95)
	AAAAAA	Kistler et al., "Disconnected Operation in the Coda File System," School of Computer Science, Carnegie Mellon University, Pennsylvania (undated)
	ABBBBB	Krill, "NETWORKING: Tech Update," InfoWorld, vol. 18 (02/12/96)
	ACCCCC	Kumar et al., "Log-Based Directory Resolution in the Coda File System," School of Computer Science, Carnegie Mellon University, Pennsylvania (undated)
	ADDDDD	Larson et al., "A Theory of Attribute Equivalence in Databases with Application to Schema Integration," IEEE Transactions on Software Engineering, Vol. 15, No. 4, April 1989
	AEEEEEE	Mannino et al., "Matching Techniques in Global Schema Design," IEEE 1984
	AFFFFFF	Marshall, "Product Reviews: Windows contact managers," InfoWorld, Vol. 18 (03/25/96)
	AGGGGG	McGoveran, "Distributed not yet delivered," Computerworld, p. 112 (06/06/94)
	AHHHHH	Meckler Corporation, "Palmtop-to-desktop linkage software," Database Searcher (06/1992)
	AIIIII	Microsoft Press Computer Dictionary, Second Edition, 1994, p. 164
	AJJJJJ	Microsoft Press Computer Dictionary, Second Edition, 1994, pp. 105, 217, 227, 228
	AKKKKK	Milliken, "Resource Coordination Objects: A State Distribution Mechanism," (DRAFT) (12/10/93)
	ALLLLL	Nash, "Replication falls short," Computer world, p. 65 (11/21/94)
	AMMMMM	Noble et al., "A Research Status Report for Adaptation for Mobile Data Access," School of Computer Science, Carnegie Mellon University (undated)
	ANNNNN	"PackRat PIM gets older and wiser with Release 4.0; PIM update sports enhanced interface, greater ease of use," InfoWorld (12/23/91)
	AOOOOO	"Palmtop PCs: power by the ounce; Hardware Review; overview of six evaluations of palm-top computers; includes related articles on Editor's Choices, suitability-to-task ratings, impressions by individual users; evaluation," PC Magazine (07/1991)
	APPPPP	"Pen-based PCs ready for prime time; includes related article on comparison of operating systems, list of vendors of pen-based products," PC-Computing (11/1991)
	AQQQQQ	Perera, "Synchronization Schizophrenia," Computerworld Client/Server Journal, p. 50 (10/01/95)
	ARRRRR	Petersen et al., "Bayou: Replicated Database Services for World-wide Applications," Computer Science Laboratory, Xerox Palo Alto Research Center, California (undated)

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	ASSSSS	"Product comparison: Atari Portfolio, Casio Executive BOSS, HP 95LX, Poqet PC, Psion series 3, Sharp Wizard," InfoWorld (12/16/91)
	ATTTTT	"PRODUCT COMPARISON: Personal information managers," InfoWorld, vol. 17 (08/07/95)
	AUUUUU	Radosevich, "Replication mania," Computerworld Client/Server Journal, p. 53 (10/01/95)
	AVVVVV	Ratner et al., "The Ward Model: A Replication Architecture for Mobile Environments," Department of Computer Science, University of California (undated)
	AWWWWW	Reiher et al., "Peer-to-Peer Reconciliation Based Replication for Mobile Computers," UCLA (undated)
	AXXXXX	Reiher et al., "Resolving File Conflicts in the Ficus File System," Department of Computer Science, University of California (undated)
	AYYYYY	Ricciuti, "Object database server," InfoWorld, Vol. 18 (01/29/96)
	AZZZZZ	"Riding the NewWave from PC to Palmtop: IntelliLink lets NewWave users transfer files," InfoWorld (06/03/91)
	AAAAAA	Salto et al., "Suitability of data models as canonical models for federated databases," Universitat Politecnica de Catalunya, Spain (undated)
	ABBBBB	Satyanarayanan, "Coda: A Highly Available File System for a Distributed Workstation Environment," School of Computer Science, Carnegie Mellon University (undated)
	ACCCCC	Satyanarayanan, "Fundamental Challenges in Mobile Computing," School of Computer Science, Carnegie Mellon University (undated)
	ADDDDD	Satyanarayanan, "Mobile Information Access," IEEE Personal Communications, Vol. 3, No. 1 (Feb. 1996)
	AEEEEEE	Sherman, "Information Technology: 'What Software Should I Use to Organize My Life'," (undated)
	AFFFFFF	Sheth et al., "A Tool for Integrating Conceptual Schemas and User Views," IEEE 1988
	AGGGGG	Schilit et al., "The ParcTab Mobile Computing System," Xerox Palo Alto Research Center, California (undated)
	AHHHHH	SPI Database Software Technologies Record Displays: Record 2, Serial No. TDB0291.0094 and Record 4, Serial No. iets0901.0073 (undated)
	AIIIII	Staten, "PowerMerge 2.0 ships; syncs moved filed," MacWEEK, Vol. 8, p. 38(1) (01/03/94)
	AJJJJJ	Tait, Doctoral Thesis entitled "A File System for Mobile Computing," (01/01/1993)
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	ALLLLL	Webster's Ninth New Collegiate Dictionary, 1986, pp. 114, 436, 440, 462, 573, 597, 620, 717, 906, 963, 979, 989, 1000, 1053, 1130, 1142, 1152, 1162, 1166,
	MMMMM	Wiederhold, Gio, Database Design, Second Edition, McGraw-Hill Book Company, 1983, p. 2
	ANNNNN	Wiederhold, Gio and Qian Xiaolei, "Consistency Control of Replicated Data In Federal Database," IEEE, pp. 130-132. 1990.
	AOOOOO	Zaino, "Tapping the Top Values in PDAs - Personal digital assistants that sell for as little as \$300 can put a PC in the palm of your hand. Get the scoop on 8 contenders," HomePC, pp. 97 (10/01/96)

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